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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,310

07/20/2006

Johannes Maria Van Meurs

NL040055

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12/23/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

A, MINH D

ART UNIT

PAPER NUMBER

2821

MAIL DATE

DELIVERY MODE

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,310	Applicant(s) VAN MEURS ET AL.	
	Examiner MINH D. A	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is a response to Applicant's Amendment filed on September 10, 2008. In virtue of this amendment, 1-13 are currently presented in the instant application.

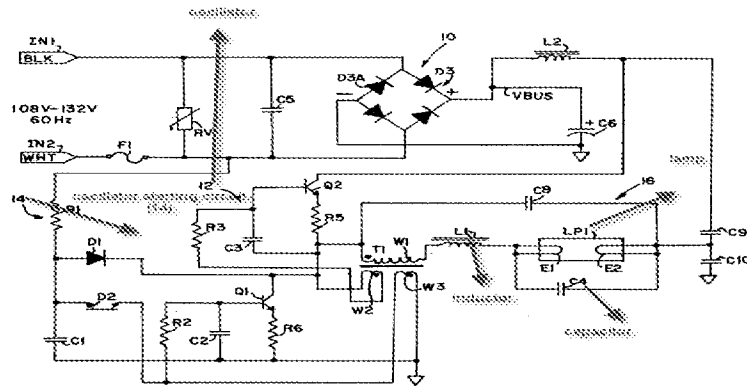
Applicant's arguments, see Remark, filed September 10, 2008, with respect to claims 1-13 have been fully considered and are persuasive. However, newly discovered References (Applicant Admitted Prior Art (AAPA), Sun et al (U.S Patent No: 5,138,235) in view of Rast et al (U.S Patent No: 6,426,597) and newly discovered References Masheshwari et al (U.S Patent No: 5,932,976) in view of Rast et al (U.S Patent No: 6,426,597).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (Sun et al (U.S Patent No: 5,138,235) in view of Rast et al (U.S Patent No: 6,426,597).



Regarding claim 1, AAPA discloses in figure above that, discloses a starting and operating circuit for an arc discharge lamp. The circuit comprises a DC power supply means coupled to AC input terminals, oscillator means coupled to said DC power supply to receive a DC voltage, oscillator starting (14) means and load means coupled to the output of the oscillator and including an inductor (L1) in series with the discharge lamp (LP1) and a capacitor (C4) in parallel to the lamp (LP1). Upon switching on an AC power supply to the circuit the capacitor has low impedance, an initial current through the inductor is high and a voltage across filamentary electrodes at ends of the lamp is high. With said latter voltage being sufficient high the lamp will ignite. Then the impedance of the load will decrease, which is reflected to the operation of the oscillator such that its oscillation frequency decreases from an ignition frequency to a lower

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normal operating frequency. In one example the ignition frequency is 46 kHz and the normal operating frequency is 25 kHz (according to electronic file of said document).

This means a ratio between those frequencies is 1.84. See page 6, lines 6-12 as shown in specification amendment on September 10, 2008.

AAPA does not disclose that, the discharge lamp (LP1) is gas discharge lamp and the ratio of the at least 2.2.

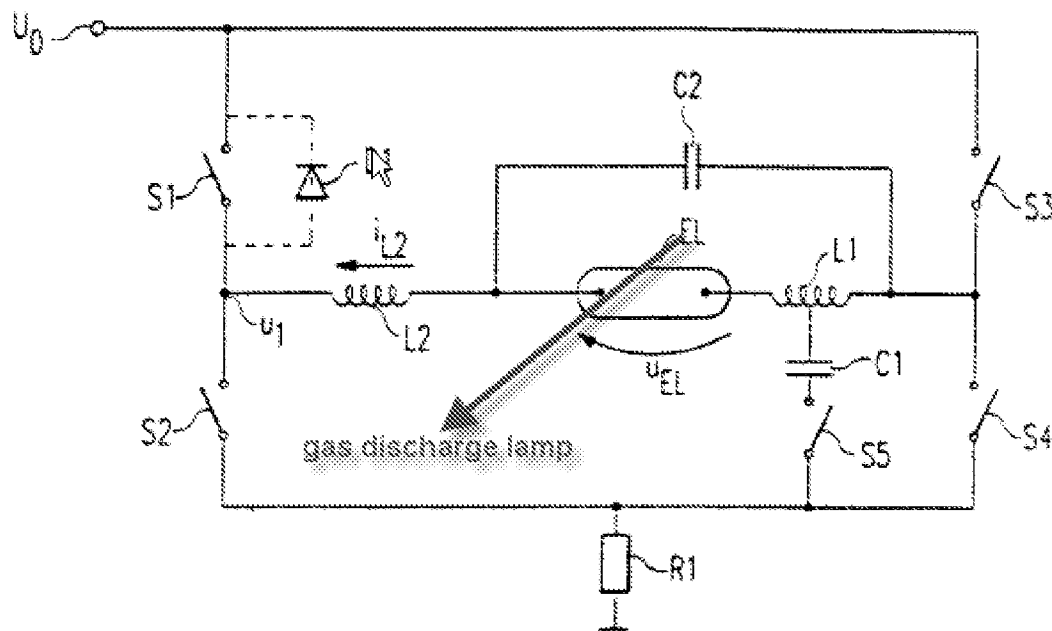


Fig. 1

Rast et al disclose in figure 1 that, the discharge lamp is a gas discharge lamp (EL). See abstract

It would have been obvious to one having ordinary skill in the art to employ the gas discharge lamp disclosed in Rast et al in the discharge lamp of AAPA to achieve the claimed invention. As disclosed in Rast et al, the motivation for the combination would be to high pressure gas discharge lamp and would be to obtain a higher ignition voltage.

Combination AAPA and Rast et al disclose the ratio is at least 2.2.

This difference is not of patentable merit since, the difference of ratio is required the range of frequency between the ignite frequency and operating frequency and a result high frequency and low frequency is subject to optimization.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the ratio for at least 2.2 instead the ratio for at least 1.84, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 2-3, combination AAPA and Rast et al obviously disclose wherein the ratio is in a range 2.2 to 7 as show in claim 1 above.

Regarding claims 4-5, combination AAPA and Rast et al obviously disclose all of the claimed subject matter, as expressly recited in claim 1, except for wherein the oscillating frequency is frequency modulated with less than 15% of an average of the

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oscillating frequency or wherein the frequency modulation is about 7% of the average of the oscillating frequency.

However, providing the frequency modulated with less than 15% or 7% of an average of the oscillating frequency from the oscillating frequency is not of patentable merits since it is directed to a operation of frequency in the ballast which does not differentiate apparatus claim from the prior art. A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim. See MPEP § 2114.

Claim 6, combination AAPA and Rast et al obviously disclose wherein the modulating frequency being derived from an AC supply (AC source) to the DC source (DC source). See figure 1 of AAPA.

Regarding claim 7, AAPA discloses in figure above that, discloses a starting and operating circuit for an arc discharge lamp. The circuit comprises a DC power supply means coupled to AC input terminals, oscillator means coupled to said DC power supply to receive a DC voltage, oscillator starting (14) means and load means coupled to the output of the oscillator and including an inductor (L1) in series with the discharge lamp(LP1) and a capacitor (C4) in parallel to the lamp(LP1). Upon switching on an AC power supply to the circuit the capacitor has low impedance, an initial current through the inductor is high and a voltage across filamentary electrodes at ends of the lamp is high. With said latter voltage being sufficient high the lamp will ignite. Then the impedance of the load will decrease, which is reflected to the operation of the oscillator

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such that its oscillation frequency decreases from an ignition frequency to a lower normal operating frequency. In one example the ignition frequency is 46 kHz and the normal operating frequency is 25 kHz (according to electronic file of said document). This means a ratio between those frequencies is 1.84. See page 6, lines 6-12 as shown in specification amendment on September 10, 2008.

AAPA does not disclose that, the discharge lamp (LP1) is gas discharge lamp and the ratio of the at least 2.2.

Rast et al disclose in figure 1 that, the discharge lamp is a gas discharge lamp (EL). See abstract

It would have been obvious to one having ordinary skill in the art to employ the gas discharge lamp disclosed in Rast et al in the discharge lamp of AAPA to achieve the claimed invention. As disclosed in Rast et al, the motivation for the combination would be to high pressure gas discharge lamp and would be to obtain a higher ignition voltage.

Combination AAPA and Rast et al disclose the ratio is at least 2.2.

This difference is not of patentable merit since, the difference of ratio is required the range of frequency between the ignite frequency and operating frequency and a result high frequency and low frequency is subject to optimization.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the ratio for at least 2.2 instead the ratio for at least 1.84, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 8-9, combination AAPA and Rast et al obviously disclose wherein the ratio is in a range 2.2 to 7 as show in claim 1 above.

Regarding claims 10-11, combination AAPA and Rast et al obviously disclose all of the claimed subject matter, as expressly recited in claim 1, except for wherein the oscillating frequency is frequency modulated with less than 15% of an average of the oscillating frequency or wherein the frequency modulation is about 7% of the average of the oscillating frequency.

However, providing the frequency modulated with less than 15% or 7% of an average of the oscillating frequency from the oscillating frequency is not of patentable merits since it is directed to a operation of frequency in the ballast which does not differentiate apparatus claim from the prior art. A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim. See MPEP § 2114.

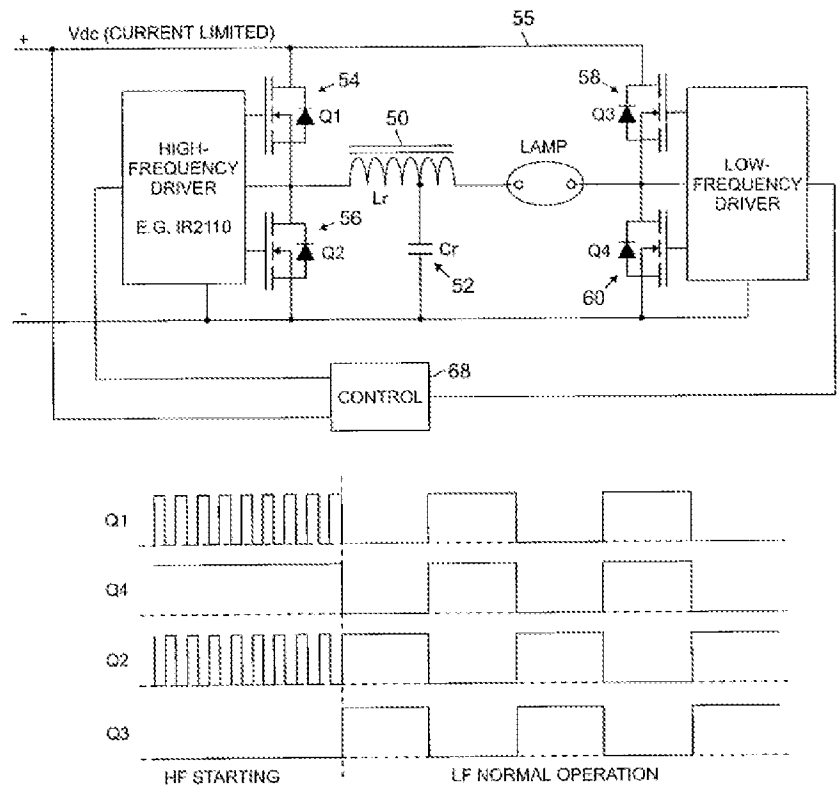
Regarding claim 12, combination AAPA and Rast et al obviously disclose wherein the modulating frequency being derived from an AC supply (AC source) to the DC source (DC source). See figure 1 of AAPA.

Regarding claim 13, combination AAPA and Rast et al obviously disclose a gas discharge lamp, an inductor which is in series with the lamp, and a capacitor which is in parallel to the lamp, a DC supply circuit(10) and a driver according to claim 1 which is connected in series between the DC supply circuit and the lamp. See AAPA in

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figure 1 above and DC power supply (1) is connected series between the DC supply circuit (10) and the lamp (LP1 and driver (Q2)).

3. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Maheshwari et al (U.S Patent No: 5,932,976) in view of Rast et al (U.S Patent No: 6,426,597).



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Regarding claims 1 and 7, Maheshwari et al discloses in two figures above that, a high frequency driver for a high intensity discharge lamp, which is in series with an inductor (L_r) and which has a capacitor (C_1) connected in parallel to it, comprising an oscillator(controller), which has DC input terminals(V_{dc}) for connecting to a DC source and AC output terminals(controller having a half bridge and controlling the AC frequency voltage to the lamp, col.3, lines 40-44) for connecting to a load comprising the lamp, the inductor and the capacitor, the oscillator(controller for operating high and low frequency AC voltage,col.3, lines 40-45, also abstract and figure above for HF starting and LF normal operation) for oscillating a lamp voltage_at a first high frequency during ignition of the lamp and the oscillator oscillating the lamp voltage at a second high frequency during normal operation of the lamp after its ignition.

Maheshwari et al do not disclose the lamp is a gas discharge lamp and the first frequency being higher than the second frequency by a ratio of at least 2.2.

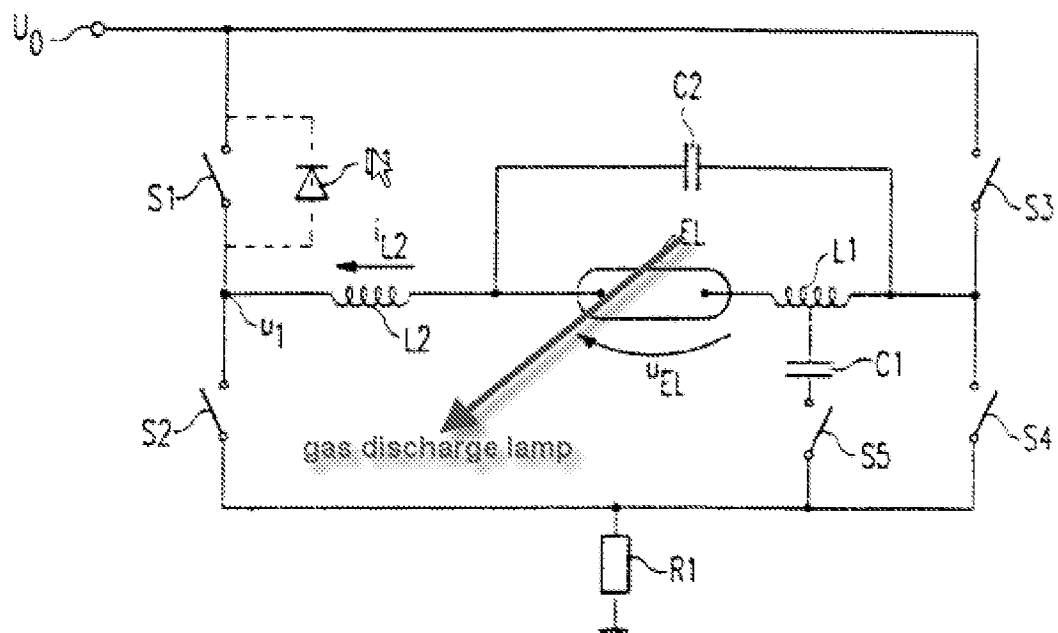


Fig. 1

Rast et al disclose in figure 1 that, the discharge lamp is a gas discharge lamp (EL). See abstract.

It would have been obvious to one having ordinary skill in the art to employ the gas discharge lamp disclosed in Rast et al in the discharge lamp of AAPA to achieve the claimed invention. As disclosed in Rast et al, the motivation for the combination would be to high pressure gas discharge lamp and would be to obtain a higher ignition voltage.

Combination AAPA and Rast et al do not disclose the ratio is at least 2.2.

This difference is not of patentable merit since, the difference of ratio is required the range of frequency between the ignite frequency and operating frequency and a result high frequency and low frequency is subject to optimization.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the ratio for at least 2.2, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2: 45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Owens Douglas W can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is

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assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Minh A

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Date 12/08/08

/Douglas W Owens/
Supervisory Patent Examiner, Art Unit 2821
December 19, 2008